REMARKS

The Examiner is thanked for indicating that claims 4-6, 11-12, 15-19, 22-27, 28, and 30 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reconsideration of this application is respectfully requested in light of the foregoing amendments and the following remarks.

Each of claims 1, 7 and 20 has been amended for reasons unrelated to patentability, including at least one of: to explicitly present one or more elements implicit in the claim as originally written when viewed in light of the specification thereby not narrowing the scope of the claim, to detect infringement more easily, to enlarge the scope of infringement, to cover different kinds of infringement (direct, indirect, contributory, induced, and/or importation, etc.), to expedite the issuance of a claim of particular current licensing interest, to target the claim to a party currently interested in licensing certain embodiments, to enlarge the royalty base of the claim, to cover a particular product or person in the marketplace, and/or to target the claim to a particular industry.

Claim 13 was amended solely to correct a typographical error, and thus, not for reasons related to patentability.

Each of claims 1, 7, 20, and 22 has been broadened. Claims 1-31 are now pending in this application. Claims 1, 7, 14, and 20 are the independent claims.

I. The Objection to Claims 7, 13, 20, and 31

Claims 7, 13, 20, and 31 were objected to for informalities. Claims 7, 13, 20, and 31 have been amended to correct the informalities. Therefore, Applicants respectfully submit that any grounds for this objection, and respectfully request acknowledgment thereof.

II. The Anticipation Rejection

Claims 1-3 were rejected as anticipated under 35 U.S.C. §102(e). In support of the rejection, Skalecki (U.S. Patent No. 6,195,354) was cited. This rejection is respectfully traversed.

Claims 7-8 were rejected as anticipated under 35 U.S.C. §102(e). In support of the rejection, Roberts (U.S. Patent No. 6,574,195) was cited. This rejection is respectfully traversed.

Skalecki and Roberts each fail to establish a prima facie case of anticipation. See MPEP 2131. To anticipate expressly, the "invention must have been known to the art in the detail of the claim; that is, all of the elements and limitations of the claim must be shown in a single prior art reference, arranged as in the claim". *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001). The single reference must describe the claimed subject matter "with sufficient clarity and detail to establish that the subject matter existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention". *Crown Operations Int'l, LTD v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002). Moreover, the prior art reference must be sufficient to enable one with ordinary skill in the art to practice the claimed invention. *In re Borst*, 345 F.2d 851, 855, 145 USPQ 554, 557 (C.C.P.A. 1965), *cert. denied*, 382 U.S. 973 (1966); *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354, 65 USPQ2d 1385, 1416 (Fed. Cir. 2003) ("A claimed invention cannot be anticipated by a prior art reference if the allegedly anticipatory disclosures cited as prior art are not enabled.")

Claims 1-3

Skalecki allegedly recites:

> candidate transmission links are identified based on a comparison of the current and projected bandwidths on the links affected by the transfer. One such equation for effecting the comparison is:

> $|UC_z - UC_K| > |UP_z - UP_K|$.
>
> where UC_z is the current bandwidth utilization of transmission link 30c presently carrying active path 40c, UC_K is the current bandwidth utilization of candidate transmission link, 30a or 30b, UP_z is the projected bandwidth utilization of transmission link 30c presently carrying active path 40c, and UP_K is the projected bandwidth utilization of candidate transmission link 30a or 30b. Projected bandwidth utilization UP_z represents the bandwidth utilization of transmission link 30c after active path 40c is mod from it, and projected bandwidth utilization UP_K represents the bandwidth utilization of candidate transmission link 30a or 30b after active path 40c is moved to it.

See col. 4, lines 2-20.

Thus, Skalecki compares a "current bandwidth utilization of transmission link 30c" to "the current bandwith utilization of candidate transmission link, 30a or 30b". Consequently, Skalecki allegedly discloses **comparing variable "bandwidth utilization[s]" associated with only two particular links**.

Claim 1, from which claims 2-3 depend, recite "identifying which of said links are congested by determining, for each of said links, that **a utilization for the link exceeds a ... maximum link utilization associated with all of the links** and associated with a bandwidth that is below a maximum capacity of the link".

Accordingly, Skalecki does not teach expressly or inherently "identifying which of said links are congested by determining, for each of said links, that **a utilization for the link exceeds a ... maximum link utilization associated with all of the links** and associated with a bandwidth that is below a maximum capacity of the link".

Consequently, it is respectfully submitted that the rejection of claim 1 is unsupported by Skalecki and should be withdrawn. Also, the rejection of claims 2 and 3, each ultimately depending from independent claim 1 is unsupported by Skalecki and also should be withdrawn.

Claims 7-8

Roberts allegedly recites:

> in utilizing the TCP start up procedure, a conventional network 100 would not be able to avoid the slow start-up associated with TCP. In particular, conventional implementation of TCP rely upon random early discards ('RED') to enable the TCP transmission to reach the **available rate** and not to create congestion that would result in unwanted loss in the transmission. In one embodiment of the present invention, by possessing rate information relating to the micro-flow can rise to the available rate much quicker, thereby increasing the performance of the transmission.

See col. 16, lines 34-46.

FIG. 9 of Roberts allegedly illustrates an "**available rate**" above which results in "congestion loss". FIG. 9 also allegedly illustrates that Roberts attempts to transmit packets at a rate **above** the "available rate", which can be viewed as a "maximum capacity of the link".

Claim 7, from which claim 8 depends, recites "identifying one or more network links as congested by determining that, for each link, a utilization of the link exceeds a ... maximum link utilization, the **maximum link utilization** associated with all of the links and associated with a bandwidth that is **below a maximum capacity of the link**".

Thus, Roberts does not teach expressly or inherently "identifying one or more network links as congested by determining that, for each link, a utilization of the link exceeds a ... maximum link utilization, the **maximum link utilization** associated with all of the links and associated with a bandwidth that is **below a maximum capacity of the link**".

Accordingly, it is respectfully submitted that the rejection of claim 7 is unsupported by Roberts and should be withdrawn. Also, the rejection of claim 8, which depends from claim 7, is unsupported by Roberts and also should be withdrawn.

III. The Obviousness Rejection

Claims 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roberts (U.S. Patent No. 6,574,195) in view of Skalecki (U.S. Patent No. 6,195,354). These rejections are respectfully traversed.

Claims 14 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Meempat (U.S. Patent No. 6,778,496) in view of Skalecki (U.S. Patent No. 6,195,354). These rejections are respectfully traversed.

Claims 20-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Meempat (U.S. Patent No. 6,778,496) in view of Roberts (U.S. Patent No. 6,574,195). These rejections are respectfully traversed.

None of the cited references, either alone or in any combination, establish a *prima facie* case of obviousness. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." See MPEP § 2143.

Claims 9 & 10

Claim 7, from which each of claims 9 and 10 depend recites "identifying one or more network links as congested by determining that, for each link, a utilization of the link exceeds a ... maximum link utilization, the maximum link utilization associated with all of the links and associated with a bandwidth that is below a maximum capacity of the link". As discussed above, Roberts does not teach expressly or inherently "identifying one or more network links as congested by determining that, for each link, a utilization of the link exceeds a ... maximum link utilization, the maximum link utilization associated with all of the links and associated with a bandwidth that is below a maximum capacity of the link". Skalecki does not overcome the deficiencies of Roberts.

Thus, even if there were motivation or suggestion to modify or combine the cited references (an assumption with which the applicant disagrees), and even if there were a reasonable expectation of success in combining or modify the cited references (another assumption with which the applicant disagrees), the cited references still do not expressly or inherently teach or suggest **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness.

Because no *prima facie* rejection of any independent claim has been presented, no *prima facie* rejection of any dependent claim can be properly asserted.

Consequently, reconsideration and withdrawal of these rejections is respectfully requested.

Claims 14, 20, 21, and 29

Meempat allegedly recites as "the message travels along the path, a cost metric field within the message is updated. The cost metric may reflect available bandwidth or percentage utilization of the aggregate bandwidth on the most congested (bottleneck) link in the path that it tracks." *See* Abstract.

Each of independent claims 14 and 20 recites "by determining that **a link utilization exceeds a ... bandwidth** that is **below a maximum capacity of the link**".

Meempat does not expressly or inherently teach or suggest "by determining that **a link utilization exceeds a ... bandwidth** that is **below a maximum capacity of the link**".

Neither Skalecki nor Roberts overcome the deficiencies of Meempat.

Thus, even if there were motivation or suggestion to modify or combine the cited references (an assumption with which the applicant disagrees), and even if there were a reasonable expectation of success in combining or modify the cited references (another assumption with which the applicant disagrees), the cited references still do not expressly or inherently teach or suggest every limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness.

Because no *prima facie* rejection of any independent claim has been presented, no *prima facie* rejection of any dependent claim can be properly asserted.

Consequently, reconsideration and withdrawal of these rejections is respectfully requested.

IV. Allowable Subject Matter

The following statements are reasons for the indication of allowable subject matter.

> "Claims 1-6 and 30 are allowable because none of the references of record alone or in combination disclose or suggest 'identifying which of said links are congested by determining, for each of said links, that a utilization for the link exceeds a **predetermined parameter** associated with the link, said predetermined parameter a maximum link utilization, the maximum link utilization **associated with all of the links** and associated with a bandwidth that is below a maximum capacity of the link'.

Claims 7-13 and 31 are allowable because none of the references of record alone or in combination disclose or suggest 'identifying one or more network links as congested by determining that, for each link, a utilization of the link exceeds a predetermined parameter, wherein the predetermined parameter is a maximum link utilization, the maximum link utilization associated with all of the links and associated with a bandwidth that is below a maximum capacity of the link'.

Claims 14-19 and 28-29 is allowable because none of the references of record alone or in combination disclose or suggest 'a congestion identifying device, wherein the congestion identifying device identifies a congestion of network links by determining that link utilization exceeds a predetermined traffic load parameter, wherein the predetermined traffic load parameter is a maximum link utilization, the maximum link utilization associated with all of the links and associated with a bandwidth that is below a maximum capacity of the link'.

Claims 20-27 are allowable because none of the references of record alone or in combination disclose or suggest 'a congestion identifying device, wherein the congestion identifying device: generates, in the event of a single network link failure case n=1, 2, ... k, where k is a number of all the links in the network, a traffic road map generated based on a first routing technique; and identifies one or more network links as congested, by determining that a link utilization exceeds a predetermined traffic load parameter, wherein the predetermined traffic load parameter is a maximum link utilization, the maximum link utilization associated with all of the links and associated with a bandwidth that is below a maximum capacity of the link'".

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CONCLUSION

It is respectfully submitted that, in view of the foregoing amendments and remarks, the application as amended is in clear condition for allowance. Reconsideration, withdrawal of all grounds of rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. §1.16 or §1.17 to Deposit Account No. 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

Michael Haynes PLC

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Michael N. Haynes

Registration No. 40,014

1341 Huntersfield Close

Keswick, VA 22947

Telephone: 434-972-9988

Facsimile: 815-550-8850